

Fw: Information Update - Description has changed: Prebrief/Goliad Groundwater Conservation District Mtg (GCGCD office visit scheduled for 8/6 @ 1:30 pm)
Stacey Dwyer to: Philip Dellinger

08/01/2012 10:13 AM

From: Stacey Dwyer/R6/USEPA/US
To: Philip Dellinger/R6/USEPA/US@EPA

Sent by EPA Wireless Email Services
William Honker

----- Original Message -----

From: William Honker
Sent: 08/01/2012 10:06 AM CDT
To: Sam Coleman; Stacey Dwyer; Suzanne Murray; Wren Stenger
Cc: Chrissy Mann; David Gray; Layla Mansuri
Subject: Information Update - Description has changed: Prebrief/Goliad Groundwater Conservation District Mtg (GCGCD office visit scheduled for 8/6 @ 1:30 pm)

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August 6, 2012

Presentation by Goliad County Groundwater Conservation District

Region 6 – EPA

1. Residences and Church in Vicinity of aquifer exemption
2. Migration of groundwater
3. Groundwater quality
4. Modeling
5. Groundwater transport

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GOLIAD COUNTY GROUNDWATER CONSERVATION DISTRICT

118 S. Market St., P.O. Box 562, Goliad, Texas 77963-0562

Telephone: (361) 645-1716 Facsimile: (361) 645-1772

www.goliadcogcd.org

Board of Directors:

President – Art Dohmann

Vice-President – Joe Kozielski

Secretary/Treasurer – Barbara Smith

Directors – Wesley Ball, John Dreier, John B. Duke, Raulie Irwin

6WQ-D...
6WQ-A... 6WQ-C...
6WQ-E... 6WQ-P...
6WQ-S...

July 9, 2012

Mr. William K. Honker, P. E.
Acting Director
Water Quality Protection Division
U. S. Environmental Protection Agency, Region 6
1445 Ross Ave., Ste. 1200
Dallas, TX 75202-2733

RECEIVED
EPA-6WQ-DIR OFC
12 JUL 17 AM 11:45

Re: AQUIFER EXEMPTION POSITION STATEMENT FOR GCGCD

Dear Mr. Honker,

The Goliad County Groundwater Conservation District (GCGCD) is dedicated to assure long-term availability of adequate good quality drinking water for the users in the District (Goliad County). Groundwater is the only drinking water supply in the District. This groundwater is critical to maintain the health and economic viability of residents, livestock, and wildlife in the District. The protection of the drinking water supply aquifers is also the responsibility of landowners, the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA). The statutes for this requirement are very clear. The GCGCD has reviewed a copy of the letter dated May 16, 2012 that the EPA sent to TCEQ standing firm behind its request that TCEQ demonstrate that the wells adjacent to the requested aquifer exemption are not currently using the portion of the aquifer as a source of drinking water. The GCGCD supports this request and wishes to again document our concern for the safety of our water supply.

This letter is addressing the potential contamination of the Gulf Coast Aquifer underlying the District by the uranium in-situ mining process. This proposed uranium in-situ mining and associated aquifer exemption is located in north Goliad County and is surrounded by numerous residents. These residences all have a groundwater supply well for domestic, livestock, and wildlife use. For this reason, the District has been monitoring the events associated with mining permit application UR-03075 since 2006 which included exploration.

Since the beginning of uranium exploration in 2006 at the north Goliad County site, GCGCD has been testing water quality and monitoring water levels around the perimeter of the proposed mining/aquifer exemption area. GCGCD has compiled a substantial data base that is available to anyone upon request. This activity is to fulfill the purpose of the District and is not driven by unsubstantiated allegations and fears of uranium mining.

The proposed uranium mining is in all four of the sands of the Evangeline component of the Gulf Coast Aquifer. All domestic and livestock wells directly adjacent to the proposed aquifer exemption are completed in these four sands. GCGCD has repeatedly addressed the protection of this drinking water supply. Why? Because this groundwater migrates and the statutory and regulatory framework does not provide for any long term monitoring and, therefore, no long term protection for our water users. During the 2007 Legislative session, GCGCD, working with then State Representative Toureilles, testified that the monitoring period after restoration needed to be increased from the current 6 months to at least 10 years. This was in recognition that monitor wells placed 400 feet outside of the mining area would very unlikely see a movement of contaminated drinking water in that short period. The Legislature changed the 6 months to one year which logically was insignificant.

It is important to note that, on November 6, 2008, the Executive Director of TCEQ issued a decision letter which included a copy of the Executive Director's Response to comments. This document shows 188 TCEQ responses to approximately 400 comments made by concerned citizens commenting on the uranium mining permit application. Many of these comments and responses dealt with groundwater protection for the users outside of the permit boundary. TCEQ's responses acknowledged the migration of groundwater, yet never address protection for nearby water wells over time.

Response 19: Under Texas Water Code § 27.003, it is the policy of this state and the purpose of the Injection Well Act to maintain the quality of fresh water in the state to the extent consistent with the public health and welfare and the operation of existing industries, taking into consideration the economic development of the state, to prevent underground injection that may pollute fresh water, and to require the use of all reasonable methods to implement this policy. The purpose of the rules adopted by the TCEQ enabled by Chapter 27 of the Water Code is to protect groundwater quality, and thus protect both human health and safety and the environment.

Response 44: During mining, mining activities will affect the quality of water within the area of the aquifer for which the aquifer exemption is requested. This water is not currently being used for human consumption, nor will it be during mining. After mining, UEC will be required to return the aquifer's water quality to pre-mining conditions. Historically, mining projects in South Texas have not restored the aquifer to pre-mining conditions. Restoration table values have been amended pursuant to an application to amend the production area authorization through the process established in 30TAC §331.107(f) (1) and (2).

There is no historical evidence that the quality of water outside the production area will be degraded at any time. The permit prohibits the permittee from allowing mining fluids to leave the production zone; therefore, no off-site wells or portions of the aquifer used for drinking water may be contaminated. The Executive Director is not aware of any documented off-site contamination of groundwater in over 30 years of in situ mining.

Response 71 last paragraph: The executive director agrees that groundwater within the Gulf Coast Aquifer is moving and that groundwater from an exempted portion of this aquifer will eventually migrate down-gradient and out of the exempted portion of the aquifer. This fact does not preclude the exemption of an aquifer or a portion of one. Under 30 TAC §331.13(b), the commission may require a permit for injection into an exempted aquifer to protect fresh water outside the exempted aquifer from pollution caused by injection into the exempted aquifer. The permit requirements ensure that while water in the aquifer will eventually migrate down-gradient, nonetheless, mining fluids will not leave the exempted portion of the aquifer. Containment of mining solutions within the mining zone is required in the injection well permit. If UEC obtains all authorizations required for in situ mining at this site, it will be required to restore the aquifer in accordance with the requirements of 30 TAC §331.107.

The Administrative Law Judge ruled that the mining permit should not be granted due to a concern that the permit application lacked information that demonstrated that the drinking water supply was adequately protected. This recommendation was overruled by the TCEQ Commissioners. Now, the EPA has requested that modeling be done to demonstrate that the portion of the aquifer proposed for exemption does not in fact currently serve as a source of drinking water for those wells in the vicinity of the area proposed for exemption. The EPA recognizes its' responsibility to protect a drinking water supply as being a high priority. On June 6, 2012, Dr. Bryan W. Shaw, Chairman of TCEQ, addressed the U.S. House of Representatives Committee on Energy and Commerce. Dr. Shaw took exception to the above noted modeling request. Groundwater migration has been acknowledged by all parties; yet, Dr. Shaw's position as reflected in the TCEQ response to the EPA request, is that this modeling is not required. Dr. Shaw's comments focused on the term current and completely ignored the EPA's charge to ensure protection for a buffer area outside the proposed aquifer exemption boundary.

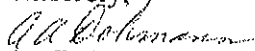
Neither the TCEQ nor Dr. Shaw has provided a groundwater protection plan that ensures that Goliad County citizens will not suffer contamination of their drinking water supply. These rural residents who rely on the groundwater must be provided protection. The average resident does not have the financial means to deal with this type of situation and it is especially demoralizing when they are not responsible for their problem. We are pleased that the EPA has stood up for County and its citizens.

As stated previously, GCGCD has done extensive groundwater testing and monitoring across the District. In a continuing effort to ensure the protection of groundwater supplies in the District, GCGCD will consider providing a hydraulic analysis of the source of drinking water to wells down-gradient of the UEC proposed uranium mine site if the agencies will use the data. This analysis will address the commentary outlined in the EPA letter to TCEQ dated May 16, 2012. Please advise GCGCD if this hydraulic analysis is desired.

GCGCD request the opportunity to have an update meeting with the Region 6 administrator and staff. This meeting could be held in Goliad or Dallas at your choice.

Thank you for your continued support.

Sincerely,



Art Dohmann, President, GCGCD

On behalf of the Board of Directors

cc: Mr. Zak Covar, Executive Director, TCEQ
Senator Kay Bailey Hutchison
Senator John Cornyn
Representative Rueben Hinojosa
State Senator Glen Hegar
State Representative Geanie Morrison

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SOURCE WATER
PROTECTION BRANCH

LYNN & GINGER COOK

3933 Kilgore Rd

Goliad, TX 77963

(361) 645-8550 (361) 676-6119

11 MAY -9 PM 2:41

6WQ-S

April 25, 2011

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11 MAY -9 PM 1:58

Mr. Miguel Flores, Director
Water Quality Protection Division
United States Environmental Protection Agency
Region 6
1445 Ross Avenue 6 WQ
Dallas, TX 75202-2733

RE: Uranium Energy Corp.
TCEQ Docket No. 2008-1888-UIC (Aquifer Exemption)

Dear Mr. Flores:

In early March of 2011, the Texas Commission on Environmental Quality (TCEQ) issued an order to grant the above referenced application.


The requested aquifer exemption is for 423.8 acres located in the northwest corner of Goliad County and includes all four sands of the Evangeline Aquifer. This aquifer provides me, my immediate and extended family, my livestock and others residing in Goliad County with our drinking water which, at this time, is of good quality.

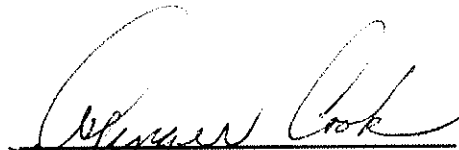
The requested area for exemption has a fault in the northwest boundary, as identified in the testimony given at the TCEQ contested case hearing (the EPA was provided a CD of all testimonies and recommendations, etc.). The administrative law judge's recommendation was to deny issuance of the permit until further testing of this area was performed to determine transmissivity and if the groundwater would or could be protected. As you are well aware, despite this being a drinking water aquifer, now and in the future, the TCEQ Commissioners granted the permit.

The EPA was presented data by the Goliad County Groundwater District's and Goliad County's expert consultants that two major requirements for an aquifer exemption cannot be achieved. Because of this data, we are requesting the EPA deny the aquifer exemption.

Therefore, in the alternative of denial, we would request that the EPA conduct a hearing on the merits and allow citizens who wish to participate the ability to do so. The large size of the requested exemption which includes four distinct layers of the aquifer and the close proximity of a large number of domestic water wells certainly warrants being classified as a "substantial" exemption, if such a designation is necessary to hold a hearing.

Respectfully,


Lynn Cook (with permission by
Ginger Cook)


Ginger Cook

GC

Cc: Al Armendariz, USEPA Administrator Region 6
Phillip Dellinger, USEPA Region 6 UIC
Ray Leissner, USEPA Region 6 UIC
Gollad County Groundwater District
Gollad County Commissioners' Court

Ginger Cook
73433 Kilgore Rd
Goliah, TX 77963



Mr. Miguel Flores, Director
Water Quality Protection Division
United States Environmental Protection Agency
Region 6
1445 Ross Avenue 6 WQ
Dallas, TX 75202-2733

Ginger Cook
3433 Kilgore Rd
Goliah TX 77963

CORPUS CHRISTI
TX 784 1 T
30 APR 2011 PM



Mr. Al Armentrout, Administrator
USEPA Region 6
1445 Ross Avenue 6 WQ
Dallas TX 75202-2733

75202+2733



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12 APR -5 PM 4:35

JAMES B. BLACKBURN, JR.

MARY W. CARTER

CHARLES W. IRVINE

ADAM M. FRIEDMAN

MARY B. CONNER

KRISTJ. DENNEY

ADAM M. FRIEDMAN

Sender's E-Mail: afriedman@blackburncarter.com

March 26, 2012

Via Federal Express and Electronic Mail

Ms. Ann Codrington, Director
Environmental Protection Agency
Office of Groundwater & Drinking Water
Drinking Water Protection Division
Ariel Rios Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 4606M
Washington, DC 20460

6WQ-E-Copy..... 6WQ-D-E-Copy.....
6WQ-A..... 6WQ-C.....
6WQ-E..... 6WQ-P.....
6WQ-S-Original.....

log #170

RE: Texas Commission on Environmental Quality Aquifer Exemption Request within
Goliad County

Dear Ms. Codrington:

On behalf of Goliad County, the Goliad County Groundwater Conservation District, a group of affected citizens and the Natural Resources Defense Council, we write to express concern for the groundwater of the Evangeline Aquifer that could be significantly harmed by a proposed "In-Situ Leach" uranium mine in Goliad County, Texas. In an effort to avoid inundating the agency with documents, all exhibits referenced herein are available upon request.

Specifically, a significant portion of the Evangeline Aquifer within Goliad County is the target of the pending request for an aquifer exemption to Environmental Protection Agency, Region 6 ("EPA-Region 6") by the Texas Commission on Environmental Quality ("TCEQ"). Granting an aquifer exemption is one of the required components before this ISL uranium mine can commence operations and contaminate the Evangeline Aquifer. Before granting the requested exemption, EPA Region 6 has directed that TCEQ conduct additional modeling of the environmental impacts on the aquifer of the proposed ISL uranium mine. We think such modeling is necessary and we urge you to support the actions of EPA Region 6.

I. Background

Groundwater from the Evangeline Aquifer is the sole source of domestic water supply for Goliad County, and, therefore, the backbone of its livelihood. Approximately 5,000 domestic and livestock water wells are located throughout Goliad County. More specifically, there are approximately fifty (50) domestic and agricultural water wells located within a one-kilometer radius of the proposed mining boundary. Each of these wells is believed to be screened at the same depths that uranium mining is being proposed (from the surface down to 400 feet). The close proximity of these wells to the proposed mining presents a great health risk to the citizens of Goliad County due to the migration of contaminants. Approving the requested exemption

Ms. Ann Codrington, Director
Environmental Protection Agency
March 26, 2012
p. 2

would authorize contamination of a relatively substantial portion of the aquifer on which Goliad County currently depends.

As described herein, the proposed aquifer exemption does not satisfy the necessary legal prerequisites for approval. The purpose of this letter is to provide the basic information that demonstrates this failure.

II. Legal Framework

Underground Sources of Drinking Water ("USDWs") are to be protected by the state program approved pursuant to the Safe Drinking Water Act ("SDWA") unless the USDW has been exempted. Uranium Energy Corp's ("UEC") proposed mining site in Goliad County is underlain by a non-exempt USDW. The ISL mining process requires injection of mining fluids into the USDW. Therefore, before mining may commence, UEC must obtain an exemption from the protection of the SDWA. However, because an aquifer exemption to the SDWA is considered an amendment to Texas' approved Underground Injection Control program, the TCEQ, not UEC, is the applicant for the aquifer exemption.

Pursuant to 40 C.F.R. § 146.4, an aquifer or a portion thereof which meets the criteria for an USDW may be determined to be an "exempted aquifer" if it meets the following criteria:

"(a) It does not currently serve as a source of drinking water; and

(b) It cannot now and will not in the future serve as a source of drinking water because:

- (1) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible;*
- (2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;*
- (3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or*
- (4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse..."¹*

Section 146.4 of the Code of Federal Regulations establishes a two-prong test for obtaining an aquifer exemption. As this letter explains, an overwhelming amount of evidence demonstrates that the requested aquifer exemption does not satisfy either prong of the criteria. However, at this time, the EPA is currently evaluating the first prong regarding whether the requested exemption currently serves as a source of drinking water. For this reason, this letter focuses solely on the first prong of the aquifer exemption inquiry.

¹ 40 CFR § 146.4 (emphasis added).

III. Correspondence between TCEQ and EPA

On May 27, 2011, EPA-Region 6 received an application from the TCEQ for exemption of a portion of the Evangeline Aquifer in Goliad, Texas, for in situ uranium mining in Goliad County.² On July 1, 2011, EPA-Region 6 responded to TCEQ's application. In its response, EPA-Region 6 noted that, "From the information provided in the application, EPA-Region 6 is unable to ascertain how the aquifer within the boundaries of the proposed exemption meets the first criterion" for an aquifer exemption.³ EPA-Region 6 requested an additional modeling analysis demonstrating that the aquifer within the proposed exemption boundary either currently serves or does not serve as a source of drinking water." *Id.* On August 29, 2011, EPA-Region 6 received a response from TCEQ stating, "TCEQ disputes the determinations that the applications for program revisions are incomplete" and requested that "EPA continue to process and consider the TCEQ's applications."⁴ NRDC, Goliad County, Goliad County Groundwater Conservation District and the citizens depend on protection of groundwater for safe drinking water, and urge the EPA to stand behind its request for additional modeling.

IV. The aquifer within the proposed exemption currently serves as a source of water for human consumption, in violation of 40 C.F.R. § 146.4(a)

When the EPA approves an aquifer exemption, it is authorizing indefinite contamination of the water within the exemption. The policy behind this action is premised on the notion that the water within the exemption does not currently and never will serve as a source of drinking water that is fit for human consumption.

TCEQ did not dispute the existence of an hydrologic connection between the groundwater within the proposed exemption and the domestic water wells directly adjacent to the proposed exemption area. Given a hydraulic connection, regional and local flow directions are crucial for determining whether nearby wells are in jeopardy of contamination as a result of the proposed mining. Regionally, groundwater flow in the area of the proposed mining site is generally to the southeast towards the Gulf of Mexico. Local groundwater flow is also generally to the east and southeast, and maps⁵ provided in the Production Area Authorization Application indicate that some groundwater within flows to the west.⁶ Accordingly, a large portion, if not all of the approximate fifty (50) wells identified on the area of review map are at risk.

In other words, this connection indicates that the water to be contaminated by the ISL mining process migrates from within the exemption boundary to the nearby domestic water wells that are currently used by Goliad citizens as a source of drinking water. Until the hydraulic connection and local groundwater flow is modeled, or until the TCEQ can provide information to counter the existing hydrogeologic makeup of the proposed mining site, we cannot understand how the proposed exemption satisfies 40 C.F.R. § 146.04(a) as an aquifer that is not currently being used as a source of drinking water.

² Exhibit 1, TCEQ Aquifer Exemption Application.

³ Exhibit 2, EPA Response.

⁴ Exhibit 3, TCEQ Response.

⁵ Exhibit 4, Figure 5-3 (August 25, 2008) from PA-1; Figure 5-3 (February 17, 2009) from PA-1.

⁶ Exhibit 5, Hearing Transcript at page 686, line11 -- page 687, line10.

Ms. Ann Codrington, Director
Environmental Protection Agency
March 26, 2012
p. 4

Despite groundwater from within the proposed exemption ultimately being used domestically once it migrates, the TCEQ argues that the aquifer exemption request still satisfies the statutory requirements because those wells are not *physically* located within the proposed exemption boundaries. However, it seems odd to imagine that the SDWA was designed to allow for such gerrymandering and clear manipulation, as urged by the TCEQ, such that a well located just one foot outside the requested exempted area would be denied the protection of a federal law designed to protect underground sources of drinking water.

Moreover, the request for modeling by EPA-Region 6 is consistent with EPA Guidance No. 34. Specifically, Guidance No. 34 clarifies that **"the area to be surveyed should cover the exempted zone and a buffer zone outside the exempted area. The buffer zone should extend a minimum of 1/4 mile from the boundary of the exempted area."** The guidance document indicates that the EPA clearly contemplated evaluating the risk associated with migration of groundwater outside a proposed exemption boundary.

For this reasons stated above, the undersigned urge EPA to stand behind its request for additional modeling of the environmental and public health impacts of the proposed ISL mine in Goliad County before any final action on the pending request for an aquifer exemption. If we can provide any more information or answer any additional questions on these matters, please do not hesitate to contact us.

Sincerely,

/s/ Adam M. Friedman
Adam M. Friedman
Blackburn Carter, P.C.
4709 Austin Street
Houston, Texas 77004
Tel: (713) 524-1012
Email: afriedman@blackburncarter.com
*Counsel for Goliad County and Goliad County
Groundwater Conservation District*

/s/ Geoffrey H. Fettus
Geoffrey H. Fettus, Senior Project Attorney
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Tel: (202) 289-2371
Email: gfettus@nrdc.org
*Counsel for Natural Resources Defense
Council*

/s/ Art Dohmann
Arthur Dohmann, President
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Conservation District
P.O. Box 562
Goliad, Texas 77963
Tel: (361) 645-1716
Email: ggcgd@goliadcogcd.org
*President of Goliad County Groundwater
Conservation District*

c: Nena Shaw, EPA Headquarters, Special Assistant to Deputy Administrator
Bill Honker, EPA Region 6, Water Quality Protection Division, Director

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JAMES B. BLACKBURN, JR.

MARY W. CARTER

CHARLES W. IRVINE

ADAM M. FRIEDMAN

MARY B. CONNER

KRISTJ. DENNEY

ADAM M. FRIEDMAN

Sender's E-Mail: afriedman@blackburncarter.com

May 6, 2011

Via Federal Express and Electronic Mail

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RE: State of Texas Aquifer Exemption Request within Goliad County

Dear Mr. Armandariz, Mr. Flores and Mr. Dellinger:

This letter is being sent on behalf of Goliad County and a group of its citizens to express concerns for their groundwater. As you are aware, a large portion of the Evangeline Aquifer within Goliad County is the target of the anticipated request for an aquifer exemption to Environmental Protection Agency, Region 6 ("EPA-Region 6") by the Texas Commission on Environmental Quality ("TCEQ"). Goliad County strongly urges that this request should be denied. Groundwater is the sole source of domestic water supply for Goliad County, and, therefore, the backbone of its livelihood. Approximately 5,000 domestic and livestock water wells are located throughout Goliad County. More specifically, there are approximately fifty (50) domestic and agricultural water wells located within a one-kilometer radius of the proposed mining boundary. Each of these wells is believed to be screened at the same depths that uranium mining is being proposed. The close proximity of these wells to the proposed mining presents a great health risk to the citizens of Goliad County due to the migration of contaminants. Approving the requested exemption would authorize contamination of a relatively substantial portion of the aquifer on which Goliad County currently depends.

As described herein, the proposed aquifer exemption does not satisfy the necessary legal prerequisites for approval. Additionally, should the exemption be granted, Goliad County does not believe the groundwater quality will be restored, because no mining operator in Texas has ever restored water quality to its original state. It is for these reasons that the TCEQ's aquifer exemption request should be denied.

In the alternative, Goliad County hereby formally requests that the EPA conduct a hearing on the merits and that Goliad County be permitted to participate as a party to the proceeding. Based on prior communications, it is our understanding that the EPA may conduct a hearing on the merits at its own discretion. However, should a formal designation as a "substantial" amendment to the Texas Underground Injection Control program be necessary to hold a hearing, the large size of the requested exemption, which consists of four distinct sand layers combining for more than 1,600 acres, coupled with the close proximity of a large number of domestic water wells, clearly warrants such a designation. *See* 40 CFR § 145.32(b)(2). If a hearing is held, Goliad County will present the following material in greater detail. The purpose of this letter, however, is to provide the basic information that demonstrates the failure to satisfy the legal prerequisites for an aquifer exemption.

I. Legal Framework

Underground Sources of Drinking Water ("USDWs") are to be protected by the state program approved pursuant to the Safe Drinking Water Act ("SDWA") unless the USDW has been exempted. Applicant Uranium Energy Corp's ("UEC") proposed mining site in Goliad County is underlain by a non-exempt USDW. The in situ process requires injection of mining fluids into the USDW. Therefore, before mining may commence, UEC must obtain an exemption from the protection of the SDWA.

Pursuant to 40 C.F.R. § 146.4, an aquifer or a portion thereof which meets the criteria for an USDW may be determined to be an "exempted aquifer" if it meets the following criteria:

"(a) It *does not currently serve* as a source of drinking water; *and*

(b) It *cannot now and will not in the future* serve as a source of drinking water because:

- (1) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible;
- (2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;
- (3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or
- (4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse..."¹

¹ 40 CFR § 146.4 (emphasis added).

As this letter explains, an overwhelming amount of evidence demonstrates that the requested aquifer exemption does not satisfy the foregoing criteria.

II. Aquifer Exemption Request Does Not Meet Prerequisites of Approval

When the EPA approves an aquifer exemption, it essentially authorizes indefinite contamination of the water within the exemption. The policy behind this action is premised on the notion that the water within the exemption does not currently and never will serve as a source of drinking water that is fit for human consumption. Therefore, establishing accurate baseline water quality conditions—before exploration and mining—within the aquifer exemption boundary is crucial so that the EPA does not authorize contamination of good quality water. Here, UEC's baseline water quality assessment was severely flawed: first, the baseline water quality data collected by UEC was derived from an insufficient number of sampling events. Second, almost all of the sampling events were targeted to sample water within the absolute highest areas of uranium ore concentration. Importantly, UEC's approach misrepresented natural conditions within the proposed exemption boundary. As discussed below, when analyzed properly, UEC's data actually shows that the groundwater could now, or in the future, be used as a source of drinking water.

Additionally, some of UEC's own water samples taken from water wells within the "Area of Review" indicated that the water directly adjacent to, and even directly within, the proposed exemption is suitable for human consumption. *See* Exhibit 1. For example, and perhaps most notably, the Albrameit Windmill which is located *inside* the proposed aquifer exemption was tested by UEC, and its results indicated that this water complied with maximum contaminant levels ("MCLs") for all constituents, thus making the water perfectly suitable for human consumption. *See* Exhibit 2. Another example is the Braquet water well, which is used for domestic purposes. The Braquet well is merely 75 feet from the proposed aquifer exemption boundary. When sampled by UEC, water quality was determined to be perfectly fit for human consumption.

In addition to the Area of Review wells, UEC developed and sampled twenty additional water wells for purposes of applying for its Class III injection well permit. These wells were labeled in the application as regional baseline wells ("RBLs"). All twenty wells were within the requested aquifer exemption boundary. *See* Exhibit 3. Five of the RBLs are screened in the A-sand, five are screened in the B-sand, five are screened in the C-sand, and five are screened in the D-sand. These wells were used to characterize the water quality throughout the entire proposed exemption area, which is more than 1,600 acres. As discussed below, water quality data from these twenty wells did not indicate that the groundwater throughout the proposed exemption boundary could not now or in the future serve as a future source of drinking water for human consumption, which is the requirement established in 40 C.F.R. § 146.4(b).

Finally, an undisputed hydrologic connection exists between the groundwater within the proposed exemption and a number of domestic water wells directly adjacent to the proposed exemption area. This connection indicates that the water that will be contaminated by the in situ mining process is currently migrating from within the exemption boundary to the nearby domestic water wells that are used by Golliad citizens as a source of drinking water. Because this water is currently serving as a source of drinking water, the proposed exemption area is precluded from exemption pursuant to 40 C.F.R. § 146.4(a).

a. Sampling data indicates that water within the proposed aquifer exemption boundary could serve now or in the future as a source of drinking water, in violation of 40 C.F.R. § 146.4(b)

First, according to Goliad County Groundwater Conservation District (“GCGCD”) records, a large number of water wells are located within a three-mile radius of the proposed mining boundary in Goliad County, illustrating the extent of the potential health risks associated with granting the exemption. *See* Exhibit 4. UEC sampled approximately fifty of these domestic and agriculture water wells that were within a closer, one kilometer area of review. *See* Exhibit 5. The average values from the fifty wells—some located within and all others located just outside the proposed mining boundary—for *all constituents* were under EPA MCLs for drinking water. *See* Exhibit 6. This result is strong circumstantial evidence that the water within the exemption boundary that is directly adjacent and hydrologically connected to the drinkable area of review wells could now or in the future serve as a source of drinking water—making any exemption a violation of the federal regulation.

Additionally, UEC tested the Albrameit Windmill, which is located *inside* the proposed aquifer exemption and screened 342 feet below the surface—the same depth as the proposed mining in the D-sand. The Albrameit Windmill water quality met EPA drinking water MCLs for all constituents. This result also serves as independent grounds for concluding that water within the requested exemption could serve as a future source of drinking water. To the extent that any domestic water wells adjacent to the proposed mining boundary are screened at the same depth, the Albrameit Windmill also demonstrates that the water within the requested exemption is currently used as a source of drinking water at wells downgradient from the proposed aquifer exemption.

Moreover, the results for the baseline wells that were presented by UEC to the TCEQ did not demonstrate that the water was undrinkable because the results were not representative of true water quality. To define baseline water quality within the proposed exemption area, UEC relied on twenty RBLs. The RBLs were evenly distributed across the four sand layers—five in each of sand layers A, B, C and D. Each sand layer represents a distinct 423.8-acre portion of the aquifer being requested for exempt status. Essentially, UEC relied on a mere twenty samples to represent the water quality of 1,696 acres. Based on sampling from these RBLs, UEC submitted to the TCEQ that the average concentration of uranium and radium-226 throughout the entire exemption is 0.401 mg/l and 579 pCi/l, respectively. However, this sample set was inadequate to conclude that this water is unusable now or in the future: specifically, this few number of samples would not satisfy the TCEQ’s own rule for establishing background concentration in a production area authorization. Under TCEQ rules, 30 T.A.C. § 331.104(c) requires a minimum of one baseline well per every four acres of production area. UEC did not achieve anything close to that ratio.

Compounding the misleading nature of baseline conditions, UEC deliberately located and screened each of the twenty RBL wells in the areas where uranium ore concentrations were projected to be the highest and densest. *See* Exhibit 7.² Relying on such a limited sample set that was also hand-picked to detect the highest concentrations, UEC has, at best, failed to establish with any reliability that the water within the exemption area is unusable. At worst,

² This map only reflects four RBL wells in the B-Sand. UEC located the fifth RBLB well outside the proposed mining boundary.

UEC has significantly misrepresented the true conditions of water quality throughout the entire requested aquifer exemption boundary. Consequently, by not only using an exceptionally small sample size relative to the total acreage of water, but also by using unrepresentative samples, UEC has mischaracterized the true water quality conditions. Accordingly, UEC's representations should not be relied upon to establish the requirements of 40 C.F.R. § 146.4.

In sum, neither UEC nor the TCEQ has met the burden of establishing that the proposed exemption complies with the federal requirement that it could not serve as a source of drinking water now or in the future.

b. Comparing the three rounds of UEC's sampling data indicates that even the water within the proposed production areas could serve now or in the future as a source of drinking water, in violation of 40 CFR § 146.4(b)

UEC's suggested background conditions for the water quality within the proposed exemption derive from samples at only twenty distinct locations, all within projected mineral areas, and only at one point in time. UEC also constructed 14 Pump Test Wells ("PTWs") in the B-sand that were sampled for the purpose of establishing baseline water quality specifically within the production area application in the B-sand ("PAA-B"). Concentrations of constituents from these fourteen wells and the four RBL wells in the B-sand were averaged together for the baseline water quality proposed in UEC's PAA-B Application.

Although the data from the first time these wells were sampled reflects poor water quality, when sampling the RBLs in the B-sand for the second time,³ uranium concentrations decreased dramatically. Similarly, when the RBLs and PTWs were sampled for the third and final time, uranium concentrations plummeted, and the overall water quality within the proposed production area in the B-sand met EPA drinking water standards for all MCLs, except radium. As explained in the subsequent section, the reason for the plummeting concentrations is explained by strong evidence that UEC solubilized uranium and liberated radium into the groundwater, causing the elevated levels it detected during its first round of sampling. In other words, it was UEC that caused the initial high levels of uranium concentrations in the first round of sampling; the water quality in the aquifer otherwise would be good and in compliance with EPA standards.

In sum, the available water quality data demonstrates that most, if not all, of the water within the proposed production areas can currently or in the future serve as a source of drinking water. But for UEC's activity causing the increased radium concentrations, it is likely that all water within the requested exemption area would have been measured to contain low uranium and radium concentrations, and to be of drinking water caliber.

- i. In drilling exploration boreholes and developing wells for testing, UEC solubilized uranium and liberated trapped radium, causing elevated levels in the groundwater that are not accurate representations of the water quality.

Dr. Ron Sass presented at hearing before the TCEQ and subsequently to EPA-Region 6 regarding UEC's activities. He explained that actions taken by UEC, such as exploration and jetting the wells for testing with an air hose, introduced oxygen into the subsurface. The oxygen

³ RBLs in the B-Sand were only RBLs sampled for a second and third time.

came into contact with the uranium ore, essentially initiating the in-situ mining process on a smaller scale. The evidence is compelling that by its actions, UEC caused uranium that was in its reduced state to solubilize and artificially elevate uranium concentrations in the groundwater. This groundwater with elevated uranium levels was then tested and the results were included in the UEC's Permit Application as a basis for establishing a "Regional Baseline." Dr. Sass further testified that as time passed after sampling, the solubilized uranium encountered the natural reducing environment at the site and re-precipitated back into mineral ore.

This process, as explained by Dr. Sass, is directly supported by the sampling data. UEC sampled RBLs in the B-sand and the fourteen PTWs three times each.⁴ RBLB-1, RBLB-3 and RBLB-5 were sampled for the first time on July 12, 2007, and RBLB-4 was sampled for the first time on July 11, 2007. UEC's proposed baseline water quality was based solely on this first round of sampling data and included a uranium concentration of 0.115 mg/L. However, when the exact same eighteen wells were sampled for the second time, the average uranium concentration dropped from 0.115 mg/L to 0.029 mg/L – below the EPA MCL for uranium. Then, on or around November 10, 2009, approximately two years after the first round of sampling and over a year after all exploration ceased, the wells were sampled for a third time and *all 18 wells* experienced a drastic decrease in uranium concentrations. In fact, every well detected uranium concentrations well below the EPA MCL for uranium of 0.03 mg/L. This final round of sampling detected an average uranium concentration of 0.005 mg/L, which is 23 times lower than the proposed baseline in the PAA-B Application. *See Exhibit 8.* This uniform decline demonstrates that UEC, in its exploration activities, caused the uranium to solubilize, which in turn artificially inflated the uranium concentrations detected in the aquifer.

Finally, Dr. Sass testified that UEC also caused elevated levels of radium. When uranium becomes soluble and dissolves into the groundwater, any trapped decay products such as radium are liberated from the ore body and, therefore, become soluble. Thus, radium can enter groundwater by dissolution of uranium ore. Goliad County cannot quantify the amount of radium that was released as a result of UEC's actions because, unlike uranium, radium remains in solution and does not re-precipitate back out from solution. Unfortunately, we cannot now know, and will never know, the true baseline levels of radium within the proposed permit boundary due to UEC's oxidizing activity prior to sampling. What we can be confident about is that the radium levels UEC has suggested as naturally occurring baseline are actually inflated by the liberated radium, caused by UEC.

In sum, comparing the third round of water quality data to the first round, which was taken during exploration activities and shortly after the wells were developed, indicates that most, if not all, the water within the proposed exemption area may be fit for human consumption. To the extent that any water is not suitable for human consumption, it is likely a direct result of UEC's exploration and well development activities. Importantly, at a minimum, the substantial decline in uranium concentrations over time underscores the severe problems with UEC only using a minimal amount of data (twenty RBLs) to establish the water quality throughout the entire requested exemption.

⁴ RBLA-5, RBLC-1, and RBLD-2 were sampled a second time, but not a third. RBLA-5 and RBLD-2 experienced a substantial decrease in uranium concentration. RBLC-1 experienced a slight increase.

c. The aquifer within the proposed exemption currently serves as a source of water for human consumption, in violation of 40 C.F.R. § 146.4(a)

The portion of the aquifer requested for exempt status is a part of the Evangeline Aquifer and currently serves as a source of drinking water to many. The closest water well used for domestic purposes is only 75 to 80 feet east of the requested exemption boundary. This well, the Braquet well, is screened in the B-sand and is hydrologically connected back into the mining area proposed in the B-sand. Mr. Neil Blandford, the expert hydrologist presented by the GCGCD, offered unchallenged testimony that the water supply for these domestic wells is obtained from the portion of aquifer upgradient of the wells and that based on the hydraulic properties of the sand B aquifer, water within the proposed exemption zone will reach the Braquet wells within a period of 2 years. *See Exhibit 9.* Even Mr. Murry, the geoscientist from the Executive Director's office of the TCEQ, agreed with Mr. Blandford's premise that a well in such close proximity as one foot, or even further away, if pumped, can draw water from the exempted area, or certainly water from the exempted area will eventually flow into that well. *See Exhibit 10.*

Two additional wells are located at the Church, southeast of the project site and down gradient from the proposed exemption. These wells are also sources of drinking water for human consumption. Other water wells within the Area of Review and beyond are likely hydrologically connected with the proposed aquifer exemption.

Despite groundwater from within the proposed exemption ultimately being used domestically once it migrates downgradient, the TCEQ argues that the aquifer exemption request still satisfies the statutory requirements because those wells are not *physically* located within the proposed exemption boundaries.

However, it seems incredibly odd to imagine that the SDWA was designed to allow for such gerrymandering and clear manipulation, as urged by the TCEQ, such that a well located just one foot outside the requested exempted area would be denied the protection of a federal law designed to protect underground sources of drinking water. For this reason, Goliad County and GCGCD have always maintained that the proposed exemption is currently serving as a source of drinking water to the adjacent water wells. Goliad County urges the EPA to be cognizant of the gerrymandering proposed by the TCEQ, and to recognize that the water is currently used for consumption, making it ineligible for exempt status under 40 C.F.R. § 146.4.

III. Uranium mining operators in Texas have never restored groundwater to pre-mining water quality conditions

Unlike the Texas legal framework, the Safe Drinking Water Act does not require restoration of groundwater to pre-mining conditions once mining ceases. Essentially, once an aquifer is exempted by the EPA, the portion of the aquifer subject to that exemption is deemed forever unusable. As previously stated, it is for this reason that it is crucial that the EPA ascertain the true groundwater quality within the proposed exemption. On the other hand, Texas regulations that purport to require post mining restoration provide scant comfort to the citizens of Goliad County. According to a United States Geological Survey report, in the history of in situ uranium mining in Texas, no uranium mining operator has *ever* returned all analytes to baseline at any Production Area. *See Exhibit 11.*

Of the 76 production area authorizations issued in Texas, an approximate 51 operators have applied for and received amendments to the originally established baseline water quality, allowing for elevated levels on contaminants to remain in the groundwater.⁵ As Dr. Bruce Darling presented at the contested case hearing, TCEQ records indicate that the agency has *never* denied an application for amended levels for restoration. The records show that such amended restoration levels significantly alleviate a polluter's responsibility of clean-up obligations. For example, Dr. Darling testified at hearing that the highest increase in the restoration goal from the original requirement for concentrations of uranium was an 8,000 % increase. The vast majority of the 51 amendments allotted for at least a doubling or tripling the amount of permitted contamination to be left in the groundwater.⁶

Data shows that, once mined, water quality at the mining location will be significantly deteriorated. Goliad County and its citizens know that the proposed Goliad project will be no different. Thus, according to the water quality data, UEC's Goliad project would cause what appears to be relatively good quality water to become completely unusable. Making matters worse, Mr. Murry from the TCEQ testified that once the amended restoration values are granted, there is no longer a requirement to monitor groundwater quality or its migration pattern – leaving all down gradient well users completely in the dark as to the suitability and safety of the water. *See Exhibit 12.* For this reason as well, Goliad County urges the EPA to deny the request for aquifer exemption, and enable Goliad County to continue to enjoy its good quality drinking water.

IV. The EPA's approval of the entire aquifer exemption would be premature because it is unknown whether Applicant can mine the uranium in sands A, C and D while sufficiently protecting groundwater, due to the uncertainty of transmissivity across an existing fault line

The vast majority of the proposed mining operation straddles the Northwest Fault. *See Exhibit 13.* At the conclusion of the contested case hearing, the Administrative Law Judge ("ALJ") held that "[u]ntil the transmissivity of the Northwest Fault is resolved the ALJ concludes that *USDWs within Goliad County outside the proposed aquifer exemption area may be adversely impacted by UEC's proposed in situ uranium operations.*"⁷ In addition to safety concerns associated with mining adjacent to the Northwest Fault, UEC is unsure whether it can feasibly mine those mineral deposits due to uncertainty of transmissivity of the fault. *See Exhibit 14.*

In its review, the TCEQ discounted the ALJ's recommendation and never addressed the uncertainty surrounding the Northwest Fault. Rather, the TCEQ delayed the issue. Specifically, the TCEQ concluded that "future [production area authorization] applications will include the results of hydrologic testing and an interpretation of those results with respect to any faults to determine the hydrologic connection both across the fault and vertically along the fault." In other words, the TCEQ deferred answering the hard question of whether mining around the Northwest Fault can be done without contaminating groundwater. Accordingly, issuing the entire

⁵ A report completed by Dr. Darling documenting this information was provided to the EPA at a previous time.

⁶ *Id.*

⁷ Proposal for Decision. (emphasis added).

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aquifer exemption at this time, when so little is known about 75%⁸ of the deposits, is premature. Any exemption, at this point, should, at most, tightly border the proposed PAA in the B-sand.

Furthermore, and importantly, pending legislation in the Texas House of Representatives casts doubt on whether Goliad County will be able to challenge any UEC application for a production area authorization. Specifically, H.B. 3163 eliminates the opportunity for protestants to request and participate in a contested case hearing for production area authorizations. As previously stated, the TCEQ ignored the recommendation of the ALJ that the permit be denied, issuing the Injection Well Permit in spite of unresolved issues regarding whether mining operations will be sufficiently protective of Goliad County's groundwater. The TCEQ's decision was entirely premised on the understanding that these issues would be addressed in the future, once subsequent production area authorizations are submitted. This bill, if passed, will preclude Goliad County from having a voice in that discussion regarding protection of its *own* groundwater. Such an outcome underscores the importance of EPA taking action and denying the requested exemption.

Sincerely,

BLACKBURN CARTER, P.C.

by 
Adam M. Friedman

Enclosures

c: David Gillespie, Assistant Regional Counsel – *Via E-mail: Gillespie.david@epa.gov*
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⁸ Sands A, C and D combine for approximately 104 acreage of the approximate total 140 acreage of uranium deposits proposed for mining. See UEC Exhibit 6, Holmes Pre-filed Direct at Exhibit 3.

Fw: Information Update - Description has changed: Prebrief/Goliad Groundwater Conservation District Mtg (GCGCD office visit scheduled for 8/6 @ 1:30 pm)

Stacey Dwyer to: Philip Dellinger

08/01/2012 10:13 AM

From: Stacey Dwyer/R6/USEPA/US
To: Philip Dellinger/R6/USEPA/US@EPA

Sent by EPA Wireless Email Services
William Honker

----- Original Message -----

From: William Honker
Sent: 08/01/2012 10:06 AM CDT
To: Sam Coleman; Stacey Dwyer; Suzanne Murray; Wren Stenger
Cc: Chrissy Mann; David Gray; Layla Mansuri
Subject: Information Update - Description has changed: Prebrief/Goliad Groundwater Conservation District Mtg (GCGCD office visit scheduled for 8/6 @ 1:30 pm)



Goliad REGION 6 EXECUTIVE SUMMARY_Goliad 7-31-2012 revised.doc Agenda Proposed by GCGCD.doc



7-17-12 Aquifer Exemption Position Statement for GCGCD.pdf 110510GoliadProjectPetitionCook_0000.pdf



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Letter to EPA Region 6 Evidentiary Hearing on Aquifer Exemption from Blackburn Carter 5-6-11.pdf



Sept. 26 - Adam M. Friedman - Request for Aquifer Exemption in the Goliad Formation.pdf

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September 26, 2011

Via Federal Express and Electronic Mail

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RE: Request for Aquifer Exemption in the Goliad Formation, Goliad County

Dear Mr. Flores and Mr. Dellinger:

We were recently provided a copy of the August 29, 2011 letter ("letter") submitted by the Texas Commission on Environmental Quality ("TCEQ") to the Environmental Protection Agency, Region 6 ("EPA-Region 6") regarding TCEQ's request for an aquifer exemption in Goliad County. TCEQ appears to take the position that it is unnecessary to comply with the request for modeling made by EPA-Region 6. Essentially, TCEQ has asked the citizens of Goliad County and EPA-Region 6 to ignore the danger posed by migration of harmful constituents introduced into the groundwater by the mining process. TCEQ supports its position with an extremely narrow interpretation of the applicable regulations and guidance documents for aquifer exemptions. Goliad County strongly disagrees with the TCEQ's position and plans to respond in greater detail in a future letter to EPA-Region 6. However, at this time, the purpose of this letter is to submit an initial response and provide information that demonstrates that the proposed aquifer exemption is in fact hydraulically connected with nearby domestic water wells.

The request for modeling by EPA-Region 6 is consistent with EPA Guidance No. 34. TCEQ incorrectly argues they it is not required to provide modeling pursuant to Guidance No. 34 because the document does not explicitly list modeling among the enumerated items of the Evaluation Criteria. The document addresses this issue directly. Under the Evaluation Criteria Section, just after the list of enumerated items that must be provided by an applicant, Guidance

No. 34 states, **"In addition to the above descriptive information concerning the aquifer, all exemption requests must demonstrate that the aquifer '... does not currently serve as a source of drinking water.'** (40 CFR § 146.04(a))." In other words, after the enumerated list that TCEQ relies on, the document plainly contemplates that more is required. The document spells out what more is required: a demonstration that the aquifer does not currently serve as a source of drinking water. It seems clear that this language provides EPA-Region 6 with the authority to request any information necessary for an applicant to make this demonstration.

TCEQ further argues that to make this demonstration, it is only required to "... survey the proposed exempted area to identify any water supply wells which **tap** the proposed exempted aquifer." However, the following sentence of Guidance No. 34 clarifies that **"the area to be surveyed should cover the exempted zone and a buffer zone outside the exempted area. The buffer zone should extend a minimum of 1/4 mile from the boundary of the exempted area."** When read in its entirety, the guidance document indicates that the EPA clearly contemplated evaluating the risk associated with migration of groundwater outside a proposed exemption boundary. Accordingly, EPA-Region 6 is well within its established policies and authority to request modeling to ensure protection for these adjacent well users.

Notably, TCEQ's letter does not dispute that the water within the proposed aquifer exemption is hydraulically connected to the adjacent domestic water wells. Similarly, UEC's hydrogeology consultant, Dr. Phillip Bennett, testified at his deposition that the B sand at the production zone is continuous beyond the proposed aquifer exemption boundary. After reviewing cross-sections of the proposed Goliad mining site,¹ Dr. Bennett testified that "by looking at the logs, [the sands inside and outside the exemption area] would appear to be connected, and I would expect that they would be a continuous sand."² Dr. Bennett further opined that the B sand is continuous to the southeast at least up until the Southeast Fault, which is located some distance beyond the aquifer exemption boundary and nearby domestic water wells.³ Thus, UEC's own expert has opined about the hydrologic connection. It is Goliad County's position that the requested modeling will simply confirm existence of the already identified hydrologic connection, and that the hydrologic connection is currently grounds for denying the aquifer exemption request. However, Goliad County certainly supports the EPA's decision to ascertain more information as it deems necessary.

Given a hydraulic connection, regional and local flow directions are crucial for determining whether nearby wells are in jeopardy of contamination as a result of the proposed mining. Regionally, groundwater flow in the area of the proposed mining site is generally to the southeast towards the Gulf of Mexico. Local groundwater flow is also generally to the east and southeast, and the two piezometric maps⁴ provided for Sand B in the Production Area Authorization Application indicate that some groundwater within PA-1 flows to the west.⁵ Accordingly, because the adjacent domestic and agricultural water wells lie in these directions, a large portion, if not all of the approximate fifty (50) wells identified on the area of review map are at risk.

¹ See cross-sections, Figures 8.1, 8.2 and 8.3 of the Thomas A. Carothers report submitted to EPA-Region 6 as an enclosure to its August 29, 2011 letter.

² See Exhibit 1, Dr. Bennett's deposition transcript at page 148, line 24 – page 149, line 9.

³ See Exhibit 2, Map depicting the location of the Southeastern Fault.

⁴ See Exhibit 3, Figure 5-3 (August 25, 2008) from PA-1; Figure 5-3 (February 17, 2009) from PA-1.

⁵ See Exhibit 4, Hearing Transcript at page 686, line 11 – page 687, line 10.

Mr. Flores and Mr. Dellinger

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Until the hydraulic connection and local groundwater flow is modeled, and or until the TCEQ can provide information to counter the existing hydrogeologic makeup of the proposed mining site, Goliad County cannot understand how the proposed exemption satisfies 40 C.F.R. § 146.04(a) as an aquifer that is not currently being used as a source of drinking water. Nor can Goliad County be sure any of the nearby wells are safe from mining activities.

Considering the strong evidence of an existing hydraulic connection, it is not surprising that the TCEQ took great efforts to argue as many reasons as possible that modeling is unnecessary. The TCEQ argued that the requested modeling is "not an evaluation of current conditions but an evaluation of future conditions." Again, the TCEQ's suggestion that adjacent water wells are not relevant to the aquifer exemption inquiry is inconsistent with Guidance No. 34 and basic hydrogeologic principles. Furthermore, even assuming *arguendo* that the TCEQ's interpretation were correct, the modeling is still vital for the TCEQ to satisfy 40 C.F.R. § 146.4(b), which requires a demonstration that the water within the proposed exemption will not serve as a source of drinking water **even in the future**.

For the foregoing reasons, Goliad County and its citizens respectfully request that EPA-Region 6 maintain its initial request. If EPA-Region 6 has any questions or would like any additional documentation, please contact me at (713) 524-1012 or by email at AFriedman@Blackbucarter.com.

Sincerely,

BLACKBURN CARTER, P.C.

by 
Adam M. Friedman

Enclosures

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